



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/719,256	12/07/2000	Peter Leslie Hart	BKR-21102/01	5947

7590

12/20/2001

Douglas W Sprinkle
Suite 400
280 N Woodward
Birmingham, MI 48009

EXAMINER

ADDIE, RAYMOND W

ART UNIT

PAPER NUMBER

3673

DATE MAILED: 12/20/2001

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/719,256

Applicant(s)

HART, PETER LESLIE

Examiner

Raymond W. Addie

Art Unit

3673

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12/7/2000.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Priority

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Drawings

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the permeable layer formed from a mixture of tapered paving blocks and conventional paving blocks, as required in Claim 10 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

Claim 10 is rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Claim 10 recites "wherein the permeable layer is formed from a mixture of tapered paving blocks and conventional paving blocks".

However, such is not disclosed in the specification in a manner that one of ordinary skill in the art, would know how to form the permeable layer, since the scope of "conventional paving blocks" is not disclosed. Hence, one of skill in the art, would not know how to arrange a combination of tapered blocks and conventional blocks, commensurate with the claimed limitations.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 2, 4, 7 are rejected under 35 U.S.C. 102(b) as being anticipated by Landers # 572,762.

Landers discloses a paving block (E) for use in the construction of a paved surface.

Said paving block comprising:

An upper surface, a lower surface, side and end lateral surfaces extending between the upper and lower surfaces. Said side and end lateral surfaces capable of contacting an adjacent block side surface.

At least 2 tapered edges extending between a side surface and said upper surface.

At least one of said side and end lateral surfaces having at least one vertical channel (8) extending from the upper surface to the lower surface. See col. 2, lines 53-70.

In regards to Claim 2 Landers discloses the tapered portion extends between 10% to 80% of the entire height of the lateral surface. See Fig. 1.

In regards to Claims 4, 7 Landers discloses at least one channel per side and said block is made from impermeable material.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 3, 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Landers # 572,762. Landers discloses essentially all that is claimed, except for the angle of the tapered portion and the depth of the vertical channels. However, it is obvious that the angle of taper would have to be less than 15 degrees and the diameter of the channel would have to be less than 5mm in order to prevent injury to people walking on the surface. Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to provide the block with a tapered edge having an angle

less than 15 degrees and channels having a diameter less than 5mm in diameter in order to prevent injury to people walking on the blocks.

Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Landers in view of Barth et al. # 5,797,698.

Landers discloses essentially all that is claimed, except for a paving stone having vertical channels that are wider than they are deep. However, Barth et al. discloses a paving block (2) having at least one vertical channel (10d) having a rectangular configuration. Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to provide the paving block of Landers with a rectangular channel, in order to facilitate drainage of storm/flood waters. See col. 3, lines 36-45, col. 4, lines 4-8.

Claims 8, 9, 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Landers # 572,762 in view of Jones # GB 2,227,775 A.

Landers discloses all that is claimed, as put forth with respect to Claim 1 above, but does not disclose the structure of the surface upon which the paving blocks can be laid. However, Jones teaches a drainage assembly for installation around a tree or shrub. Said installation comprising a paving block (13) and a supporting substrate which is permeable to liquid and is of particulate material, which provides interstitial cavities for receiving rainwater, floodwater or spillage that drains through the permeable layer of

blocks (13). Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to dispose the paving blocks of Landers, adjacent a tree or shrub in order to manage rainwater the falls or is drained into the area proximate the tree or shrub.

In regards to Claims 9, 16 Landers discloses the tapered paving blocks form a permeable layer and that the blocks are formed from a clay mixture, such as that used for forming bricks which are known to be. See col. 1, lines 40-52.

Claims 8, 11, 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Landers in view of Jones et al. US # 5,980,155.

Landers discloses all that is claimed, as put forth with respect to claim 8 above, except for using the paving blocks in outdoor areas. However, Jones et al. discloses a composite geosynthetic and method of use comprising: A dispersion layer disposed upon a filtering layer (see fig. 4c) for removal of pore pressure and the elimination of contaminants from a body of soil such as reinforced soil structures. Jones et al. further teaches that reinforced soil structures commonly comprise a cohesionless soil (sand) deposited upon a soft soil such as clay. Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to use the paving block of Landers to reinforce a soft soil, as taught by Jones et al. in order to support a traffic surface upon a soft subgrade. See Jones et al. Col. 1-2, col. 13, lines 30-36.

Claims 13, 14, 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Landers in view of Jones et al., as applied to claim 8 above, and further in view of Peggs # 5,788,413.

Landers in view of Jones et al. discloses essentially all that is claimed except for the use of a containment membrane. However, Peggs teaches a geocomposite membrane that is impermeable to water and oil. Said membrane comprising one or more dividing means (14) for dividing sections within the containment membrane, as well as, drainage means (13) for drainage of fluids within said membrane. Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to provide the paving surface of Landers in view of Jones et al. with a containment membrane, as taught by Peggs, in order to prevent oil or water from contaminating the soil adjacent a roadway or landfill. See Peggs col. 1, lines 5-13, col. 5, lines 52-col. 6, line 45.

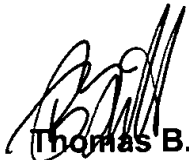
Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Close # 5,342,141 discloses a movable surface paving. Terrel # 5,078,543 discloses a storage system for solid waste material.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Raymond Addie whose telephone number is (703) 305-0135. The examiner can normally be reached on Mon-Fri from 6:30 am to 3:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Will, can be reached on (703) 308-3870. The fax phone number for this Group is (703) 305-3597.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-1113.


Thomas B. Will
Supervisory Patent Examiner
Group 3600

RWA
12/17/2001